Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 7
Notebook, N-16-02-25

This notebook was used by Edison in February 1916 for notes on the composition of disc record blanks and the application of varnish surfaces during the transfer and printing process. Included are notes describing a sequence of experiments numbered from 374E to 430E. The entries indicate results obtained from varying the proportions of ingredients in the varnish surfaces or the oven baking schedules for the disc records. The summary of results usually provides a tally of acceptable and unacceptable record surfaces, transfers, and prints obtained. Also included are experiments involving attempts to reduce bubbles and wrinkles on record surfaces. Some notes are in the form of instructions to Sherwood T. (Sam) Moore or other employees. One additional page of notes has been taped into book, and several items by Edison, including a table summarizing the results of experiments 387E-409E, have been inserted loose into the book. The front cover is labeled "Disc 7." The pages are unnumbered. Approximately 100 pages have been used.

Silver Lake has lead

3/16

5/16

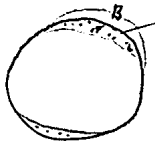
1/8

1/2

Mills & Co.,
STATIONERS,
18 JOHN ST.
AND
19 PLATT ST.
NEW YORK.

Edge blank not crushed - perfect are a little rounded

The pressures of transfer entirely too much Varnish flowed in 1½ minutes, think 100 to 20 lbs will do —



polish gone wide Varnish flowed out at B —
Var very uneven —
The rough surface X is entirely due to Excess Var This must be stopped

Prints, 4 — 3 OK · 1 big bubble —

1 Re inspection first time ck to + margin ck's + good Var at Edges
1 = alternate shows up well would be OK if Var Even

2 gobbed Var giving margin + fold ck's —

3 2 · ⅛ cks smooth side in music · margin cks
other side music OK best + only one so far in all levels in the variations Explo

4 - no cks smooth side - margin cks
music side only margin cks due to uneven Var

This shows Turned Var will make prints OK ^

~~362E~~ 374EX

Moore to get 24 flat plates

Fix 6 mould holders to

try flat plate transfers +
Used 404E Varnish

Print.

1 =	~~free~~ OK
2	free OK
1	free OK
2	free OK
1	free OK
2	free - OK
1	free
2	4 OK

Warm Plates

1	free OK
2	OK that funny long effected ck in bench - wherein Var

after Edging —
free
4 — 3 OK - 1 big bubble
good Edges —

14126 Cax

374EX

~~365~~ - Turn down 12 Var plates

so Edge only 10/1000 above

level unchanged of 32/1000

Fired Off -

~~364E~~
376E

10 Resin
14 Alcohol
625 Milg 6/4
100 " Paraa
10 " Zinc Chloride

few bubs 21 on 4 — 032 lifts
Allfrez

276 to 286 — not promising
Except 382 —
Zn Chloride is NG

~~365 E~~
377 E

10 Resin.
14 Alcohol
625 Milg 6/4
20 " " Zinc Chloride

Para left out by mistake -

30 or 40 bubs on each - Lifts -
All free Neg

~~366E~~
378E

10 Resin
14 alcohol
635 Milq 6/4
100 " Para
30 " Zinc Chloride

8 bubbles on all 4 020
all fine

~~367 F~~
374 E

10 Resin
14 Alcohol
6.25 Milg 6/4
100 " Para
50 " Zinc Chloride

All free 20 beads on cable 020

~~368 E~~
380 E
10 Resin
14 alcohol
625 Milky 6/4
100 para
100 ZincChloride —

50 tubs on each plate

2 left 2 nat. ~~2 nat~~ none free

~~369E~~
381E

10 Resin
14 Alcohol
625 Mlq 6/4
100 " Para
125 " Zinc Chloride —

Lots on all — 50 bubbles
Each palate 1 free

2—21—16

Big Oven schedule No 4 =

20	mnto	115	
20	"	125	
30	"	130	
60	"	140	Dangerous for bubbles
100	"	150	
80	"	155	
60	"	160	
40	"	165	
40	"	170	
30	"	175	
30	"	180	
30	"	185	
30	"	195	
30	"	200	
30	"	210	
30	"	220	
30	"	230	
30	"	235	
60	"	Hold 235 —	

~~370E~~
382E

10 grams Reg Resin
14 " Alcohol

625 Milg 6/4 —
100 " Plaza
20 " Zinc Chl
1 gram Glycerine

good — not free — only 2 or 3
bubs on each 015 —

~~371E~~
383E

10 grams Reg Resin
14 " Alcohol

625 mlg 6/4
100 " para
30 " ZincChl
1 gram glycerin

Very few bubbles –
All have leffs
2 frozen

~~372 E~~
384 E

10 grams Reg Resin
14 " Acetal
625 Mlg 6/4
100 " Pova
50 " Zinc Chl
1 gram glycerine

10 bats on each

1 left + free others 3 no lefts but free

~~343 E~~
385 E

10 Grams Reg Resin
14 " Alcohol

625 Milg 6/4

100 " Para
100 " Zinc Chl
1 gram glycerine

2 left free
2 no left free

6 bubs on each 015

~~374 E~~
386 E

10 grams Reg Resin
14 " Alcohol
625 mlg G/4
100 " Para
125 " Zinc Chl
1 gram Glycerine —

All free all lifted
8 to 10 oil on each

~~375E~~
387E

Phenol Series -

All this series

First Inspection

Average % free release 53%

Average % OK 75.8%

First inspection

Defects in free releases 7

" " Stuck plates 9

~~Free Phenol~~

Moral To cure bubbles dummuch free phenol if this dont do enough increase the Para, - if this is not enough slow oven schedule between 140 and 165° fahr

Para makes uneven plates

Mottz free phenol makes uneven plates

362E to 373E Series

free releases dont depend on variations phenol or Para — ??

Leave the 6/4 more the Para less the free cands

Hoffman

366E 70 plates -

100 Resin

7% phenol

8% 6/4

3% Para

No 4 a schedule

60 cc

No Scratches or negative varnish

1 free	PO at hole center	
2 3-4"	OK	
1 1-2"	PO	
2 1-2"	OK	
1 free	OK	
2 /	OK	
1 free	PO center of hole	
2 free	OK	
1 free	OK	
2 free	OK	
1 free	OK	
2 /	Ckd at Edge	

Mottle, Creeps, spots, fair body

Oven

70 Plates 2 Gubs. 5 raised

1 Dirt 62 OK of which

3 Even 48 wrinkled 9 uneven

2 Palated

% free 62% OK 62%

Inspection after buffing & Edging

OK — Bad Crumbs		
OK	OK	"
OK	OK	"
OK	OK	"
OK	OK	
OK	OK	

Hoffman

367 E 70 plates

100 Resin 60 cc

8 % Phenol

8 % 6/4

3 % Pour

no Sandrac or Requa

Varnish

Mottled, Creeps, Spots

fair body

Oven

70 Plates 1 Bad OK 69 of which

16 Even 44 wrinkled 9 uneven

Look wormy

1 free	OK	
2 free	OK	
1 free	OK	
2 /	OK	
1 free	cold lift	
2 free	OK	
1 free	OK	
2 free	OK	
1 free	OK	
2 free	OK	
1 free	OK	
2 free	OK	

Evaporation after Edging & Buffing

OK	OK	for Cracks
OK	OK	"
OK	OK	"
OK	OK	cold lift irregularly
OK	OK	"
OK	OK	

% free 88% OK 90%

Hoffman

368E 70 plates

100 Resin
9% phenol
8% 6/4
3% Para
Warm

60 cc

No Sand or Liquid

(1	free	OK
2	1 4"	OK
(1	free	OK
2	2-4"	OK
(1	free	OK
2	2-4"	OK
(1	free	OK
2	1 4"	OK
(1	free	OK
2	4 6"	OK
(1	free	Bird
2	10 of 20"	OK

Varnish
Mottled - Creeps, Spokes fair Body
Oven.
70 Plates 12 bubbles 3 Raise
55 OK of which 7 Even
48 wrinkled -
Look creamy

worst have been stuck

% free 50% OK 90%

Re inspection after edging + buffing
5 OK 1 Cracked Var →→→→ Radial
also same face

Hoffman

369E 70 plates

100 Resin
10 phenol
8% 6/4
3% para

60 cc

No Sand or Kegs

plates rather worm

Varnish
Mottled, Crazy, Opaking, fair bad

Oven
74 plates 2 Subs
71 OK plates of which
3 Even 51 wrinkled 11 uneven
All look wormy

Inspection after Etching + Buffing

1 free	OK	
2 2-4"	OK	
1 1-2"	OK	
2 2-4"	OK	
1 2-4"	OK	
2 3-4"	OK	
1 free	OK	
2 free	OK	
1 free	OK	
2 1-2"	OK	
1 free	OK	
2 /	OK	

1/2 free 40% OK 100%

Hoffman

370 E 70 plates

100 Resin

7% phenol 600 cc

4 1/2 6/4 No Sand or Ridges

3% Para

1 free	OK	Varnish
2 free	OK	good body - surface clear
1 free	Blanks green	does not crazy - OK
2 free	Big Gob Var	Oven
	valleys mechanical	
1 free	OK	70 plates 2 raised 68 OK
2 free	OK	of which 4 Even 55 wrinkled
1 free	OK	7 uneven 2 Patched
2 free	OK	All look warmy
1 free	OK	
2 /	OK	
1 free	OK	Thick gob var mixed X
2 free	OK	

% free 90% OK 90% —

Inspection after Buff & Edge —.

OK | OK X gob varnish on Edge — very ruff

OK OK

OK OK XX " " " " small or finer grain

OK OK XXX " " "

Bad one gob Var —

OK OK

Hoffman

371E 70 plates

100 Resin 60cc

8% plexal

7½ 6/4

3% Para

No Sand or Neg

Varnish

good body - good surface

plates even - dont crep or break

Oven

70 Plates All OK -

of these 5 Even 12 uneven

53 wrinkled

look wonny -

% free 75% OK 90%

1 free	OK	
2 free	OK	
1 free	OK	
2 free	OK	
1 free	OK	
2 free	OK	
1 1-2"	OK	
2 1-2"	OK	
1 free	OK	
2 free	OK	
1 1-4"	Bind-pulls	
2 free	OK	

After Edging + Buffing 1 Pull Out 2 Cracked double

Cracks are squashed var by flowing + not true

Cracks - 30K

372E 70 plates

100 Resin
9% Phenol
7½% 6/4
3% Para

60cc

No Sand or Hey

1 free	OK	
2 /	OK	
1 free	OK	
2 2-2"	OK	
1 free	OK	
2 1-6"	Crack –	
1 free	OK	
2 3-6"	Pull out	
1 free	OK	
2 free	OK	
1 free	OK	
2 free	OK	

% free 67% OK 83%

Varnish
good body – good surface
thin streaks –

Oven

70 plates 4 Bubs 1 raised
1 injured 64 OK of
which 3 Even. 53 wrinkled
5 uneven 3 polished
All look wormy

after Edging + Buffing

OK	OK
OK	OK
OK	OK
pull out	originally
OK	OK
OK	OK

373E 70 plates
60 cc

100 Resin
10 phenol
7½ 6/4
3% Paper

1 free	OK	
2 /	OK	
1 free	Pull out	
2 free	OK	
1 1-2"	OK	
2 1-2"	Redspot (Caulk) ½"	
1 -1-2"	Pull out	
2 3-6"	Bind	
1 free	OK	
2 free	small bind	
1 free	OK	
2 /	OK	

% free 50% OK 67%

Varnish
Good body clear surface
Works Fine

Oven
70 Plates 1 Bub 1 raised,
1 injured 67 OK of which
5 Even 42 wrinkled
20 uneven
All look wormy

After Edging + Buffing

OK	OK	for Cracks	
OK	OK	"	"
OK	OK	"	"
OK	OK	"	"
OK	OK	"	"
OK	1 Red Ckd.		"

RO of 1/16 ~~IIII~~ ~~IIII~~ 45cc –
1
2
3 good ||
4
5 |||
6 ||||
None ~~IIII~~

1 Record poor point several Crox angle 45° run in music
2 smooth, bad place at Edge

1 – Record – p point – feed line crox
2 Record also – feed line crox

1 Record – feed line crox
2 smooth parallell crox

Prints

1 Record feed line crox – several times
2 smooth parallell crox marqui –

1 Record – marqui crox
2 smooth few marqui crox Comel –

1 Record – feed line crox + marqui crox
2 smooth – marqui crox –

374 E Use Reg Var plates –
12 – 1412 blanks –
Transfer and increase Time
from 15 minutes schedule to
30 minutes schedule
& Print 6.

Reg Varnish – Transferred 12 all –
free release
after Buffing Transfer – 12 110k 1 Ckd Var.

Prints

{1 Smooth angle 45 nearly to music not poor print
{2 parallel Cracks Margin – pretty fair ~~not poor~~ print

{1 neither a poor print – Extreme Edge Margin Cracks
{2 ~~margin~~ " only margin Cracks Extreme Edge

{1 Both only have Extreme Margin Crack not poor print
{2

{1 Record OK
{2 Smooth 2 small Cracks on Margin

{1 Record OK but poor print
{2 Smooth part OK

{1 Record poor print fair line crack
{2 only Extreme Margin Cracks

This looks as if we want with 60cc 750 lbs instead of 1000 – or perhaps 500 lbs

375

Print the other 6 of 374 on 700 lbs pressures in Print Press This is 30 minutes held in Transfer press –

RO	fair ~~IIII~~ IIII	
1		
2	good IIII	45 CC
3		
4 I		
5 I		
6 III		
now ~~IIII~~ III		

Mean average of Glycerine leaving out 15% is for all the faces 85.6% OK – This not for Records –

Record for all the phenol series faces – 86.2%

after net ~~Rejects~~ Transfers 66.6 are OK –

Plate %	4% gly	85.1%	OK plates
	6 "	85.6	" "
	10 "	87	" "
	15 "	94	" "

OK Transfers ready To print			Faces
	4% gly	79.1%	89.6
	6 "	75	83.3
	10 "	64	91.6
	15 "	64	79.1

Hoffman

387E 70 Plates 60cc

100 Reg Resin
6% 6/4
1% Para
4% Glycerine

Transfed on 1412 Blanks brushed Varnish

C.M.5 –

(1 free OK
(2 / OK
(1 1-3" OK
(2 2-3 – Pull out small
(1 free OK
(2 1-3" OK
(1 free OK
(2 1-2" OK
(1 free OK
(2 free OK
(1 free OK
(2 free small pull out

% free release 70%
OK 83%

Oven –
71 Plates 15 bubs 1 runner
55 OK – 12 even 26 uneven
16 wrinkled 1 patch

Buffed + Edges 3
6 = 2 pull outs 1 ckd Var

Record list Inspctn OK

388 E 70 Plates 60cc

100 Reg Resin
6% 6/4
1% Para
6% Glycerine

Transfer on 1412 brushed blanx
Varnish

(1 free OK
(2 / OK

(1 free OK
(2 free OK

(1 free OK
(2 / OK

(1 1-2" OK
(2 1-2" OK

(1 free OK
(2 /-1-2" OK

(1 free OK
(2 free OK

C M S

Oven
41-plates - 9 rejected 1 [illegible]
61 OK 18 Even 26 Lym Even
16 [illegible] 1 Pinhole

Buffed Edges
6 — 60 OK

% free [illegible] 70%
OK 100%

1st + 2nd Inspection - 6 OK

389 E 70 plates 60 cc

100 Req Resin
6% 6/4
1% Para.
10% Glycerine
Transfer on 14/2 brushed blanks

(1 1-2" OK
(2 5-15" Pullout

(1 free OK
(2 free OK

(1 1-2" OK
(2 6-15" OK

(1 free OK
(2 free OK

(1 free OK
(2 /-2-10 OK GS

(1 free OK
(2 free OK sled

% free release 70%
OK 90%

Varnish
C, M, S —

Oven
72 places 9 tubs 4 racks
59 OK 15 even 20 uneven
22 wrinkle 2 pinhole

Buffed + Edged
6 — 4 OK 1 pull out 1
mechanical - Chipped Center

390 E 70 Plates 60 cc

100 Req Resin
6% 6/4
1% Para
15% Glycerine
Transfer on 1412 Grooved Blanks

(1 1-2"	OK	SK	
(2 3-10"	Pullout skid		
(1 1-2	OK	GS	
(2 1-2	Pullout Ste		
(1 free	OK	GS	
(2 free	OK	S	
(1 free	OK	GS	
(2 /	OK	GS	
(1 -1-2"	OK	S	
(2 2-8"	OK	S	
(1 2-4"	OK	S	
(2 3-8"	OK	S	

% free release 25%
OK 83%

Varnish
Creep, M, S —

OVEN
73 Plates - 2 round 2 dirt
1 Dumpe - 68 OK. 14 seen
35 unseen 2 patch 17 unseen

Buffed & Edged 6 - 4 OK
2 pull outs —

Theses

391 E 70 Plates 60 cc

100 Req Resin

6¼% 6/4

1% Para.

4% Glycerine

Transfer on 1412 Brushed Glass

Varnish

1 free		OK	GS	Creeps in Sparkles
2 free		OK	GS	
1 free		OK	GS	Oven
2 free		OK	S	75 plates 2 tubs 4 ranged
1 1-2		OK	S	69 OK 9 Even 21 uneven
2 2-5"	Bind	—	S	3 patch 36 wrinkled
1 free		OK	GS	Buffed + Edged
2 free		OK	S	6 – 4 OK 1 pull out 1 Ckd
1 free		OK	S	
2 1-2"		OK	S	
1 free		OK	GS	
2 free		OK	S	

% free release 75%

OK 90%

392 E 70 plates 60cc
100 Req Resin
6 1/4% 6/4
1% Para
6% Glycerine

(1 free	pull out	S	
(2 ✓	pull out	S	
(1 free	OK	GS	
(2 free	Pull out	S	
(1 free	OK	GS	
(2 free	OK	S	
(1 free	OK	GS	
(2 free	OK	GS	
(1 free	OK	GS	
(2 free	OK	S	
(1 free	OK	GS	
(2 free	OK	S	

Varnish
Creep Wrinkled - Spots

Oven
70 OK } uneven 3 bubs
2 Raised 1 dirt
63 OK 8 Even. 31 uneven 23 wrink
1 polish

Buffed & Edged
6 - 40K 1 Pull out 1 Bird

% free release 90% nearly 100% neg
OK 75%

393E 70 Plates 60cc

100 Req Resin

$6\frac{1}{4}$ 6/4

1% Para

10% Glycerine

Transfer on 1412 brushed blanks

1 free	OK	S	Creeps Varnish Mottled Spokes
2 3-5"	OK	S	
1 1-2"	OK	S	
2 4-6"	OK	S	
1 2-4"	OK	S	
2 4-4"	small PO	S	
1 free	OK	S	
2 /	pull outs	S	
1 free	OK	S	
2 free	OK	S	
1 free	OK	GS	
2 1-6"	OK	GS	

% free release 40%

OK 83%

OVEN

74 plates 5 bubbs 5 round 1 ungrind 63 OK-serm 16 uneven 3 patch 36 wrinkled

Buffed + Edged

6 — 4 OK — 1 pull out 1 Bad

10% Artificial Camphor
2½% Dethazu Para –
bubbles on 3/4" glass – sets about reg time
bubbles somewhat, bubbles bad on plate
Dont think its any good. Shut to plate –

10% Trichlorophenol
5% Dethazu Para Set very quick
1/3rd the time of all the others
Scarcely any bubbles if done
shade glacier would be none
after set hard on 3/4" glass & smell CCl_3
coming off – This works by far
better than any so far –
if put on plate too quick if puffs on
several plates but not bad
Comes off easy on the plate
Think it good –

394 E 70 plates 60 cc

100 Reg Resin

6 1/4 6/4

1% Para

15% Glycerine

Transfer to 1412 Grooved blanks

Varnish

1 free	OK	S	Creeps Matte Spots –
2 /	small PO	S	
1 1-2"	OK	S	Oven
2 2-2"	OK	S	
1 free	OK	S	74 plates 2 beds
2 free	OK	S	1 chipped 69 OK
			4 cracked 14 oven
1 free	OK	S	9 patched 39 uneven
2 free	OK	S	4 wrinkled
1 free	OK	S	Buffed Edged
2 3-6"	pull out	S	6 – 2 PO 1 Chd Var
1 3-3"	pull out	S	
2 4-3	pull out	S	

% free release 60%

OK 67%

Glycerin Var 1412
+ 250 lbs Transfer

Blank	OK faces	Ruffouts	Cooked centers	Cracked left	Marqin crack	group checks	long loose crack	Varnish defectable	Transfer Commercial	free	Black hard	Black soft	6/4	Para	glycerine
1412	12	5	2	1	0	1	3	387	250	4	11	4	8	6	1	4
1412	5	8	9	0	1	0	1	391	250	2	12	8	4	6 1/4	1	4
1412	11	2	11	0	0	0	1	395	250	4	11	10	3	6 1/4	2	4
1412	13	2	5	—	—	—	1	399	250	5	14	6	4	6 1/4	1/2	5

399 - Highest good faces
399 Highest Comel blanks
387 Lowest in cooked Centers
387 highest in long check Cracks
399 Highest for free release

395 E 70 Plates 60cc
100 Req Resin
6 1/4 6/4 6 1/4 6/4 2pd
2% Para
4% Glycerine

Transfer on 1412 brushed blanks

1	free	OK	GS	Varnish Creeps Mottled flakes
2	2-5"	OK	GS	
1	free	OK	S	
2	/	OK	S	
1	free	OK	GS	Oven 75 plates 7 burst 4 raised 2 dirt 67 OK 3 even 2 patch 8 unknown 54 committed
2	/	pull out	S	
1	free	OK	GS	Buffed & Edged 6-5 OK
2	free	OK	S	1 pull out,
1	free	OK	S	
2	/	OK	GS	
1	free	OK	S	
2	3-6"	OK	GS	

% free release 60%
OK 90%

396 E 70 plates 60 cc
100 Reg Resin
6¼ 6/4
2% Para
6% Glycerine
Transfer on 1412 brushed blanks

(1 free	OK	S	
(2 /	pull out red may	S	
(1 3-6"	OK	S	
(2 6-12"	OK	S	
(1 1-2" Red mang	old	GS	
(2 1-4" R	OK	GS	
(1 free	OK	GS	
(2 free Red mang	old	S	
(1 free	OK	GS	
(2 /	small PO.	S	
(1 free	red blisters	GS	
(2 /	" opposite	S	

Varnish
Creeps Mottled - Spotted

OVEN
75 plates 4 bubs 9 raised
2 dirt 60 OK - 5 Even
23 uneven 2 patch 30 wrinkled

% free release 43%
OK 50%

397 E 70 Plates 60cc
100 Reg Resin
6¼ 6/4
2% Para
10% Glycerin
Transfer on 1412 Brushed Blanks

1	2-4"	pull out	S	Varnish – Creeps Wallard effects
2	2-4	OK	S	
1	2-8"	OK	S	
2	7-20	pull out	S	
1	2-10"	OK	S	
2	1-8"	OK	S	
1	free	OK	S	
2	/	OK	S	
1	free	OK	GS	
2	free	OK	S	
1	3-10	Rebloom OK	S	
2	1-10	OK	S	

Oven
75 plates 7 ruined 1 dirt
67 OK 5 Even plates
2 Patch 28 warped 32 unsure

% free release 16%
OK 75%

398 E 70 Plates 60 cc

100 Req Resin

6 1/4 6/4

2% Para

15% Glycerin

Transfer on 1412 Brushed Blanks

1	/	OK	S	Varnish Creeps Wallfed – Spoke
2	2-10"	OK	S	
1	1-2"	OK	GS	
2	3-10	OK	GS	
1	3-8"	OK	S	
2	2-8"	pull out	S	
1	1-2	pull out	S	
2	10-20"	Cooked	S	
1	2-4"	OK	S	
2	1-4"	OK	S	
1	2-4"	OK	S	
2	3-6"	OK	S	

Oven

75 Plates 6 Buts 3 varnish
1 Dust 65 OK 19 Even
3 Pouched 5 wrinkled
38 Uneven

% of free release None
OK 75%

399 E 70 Plates 60 cc

100 Req Resin
6 1/4 6/4
1/2 % Para
4 % Glycerin

Transfer on 1412 brushed blanks

Varnish

1	free	OK	S	Creep Wall - Spots
2	2-4	OK	S	
1	free	OK	S	
2	free	OK	S	
1	free	OK	GS	
2	1-1-4"	pullout	S	
1	free	OK	S	
2	free	OK	S	
1	free	OK	S	
2	2-6	OK	S	
1	free	OK	GS	
2	free	OK	S	

Oven

74 Plates 3 bubbles 9 raised 62 OK 4 over 32 uneven 3 patch 23 wrinkled all have fine bubbles -

Burft Edges 6-30 OK
1 pullout 2 ckd V cut
1 is curvature a left ckd

% free releases 75%
OK 90%

400 E

70 plates 60 cc

100 Req Resin
6¼ 6/4
½ % Para
6% Glycerin

Transfer to 1412 Grooved Blank
Varnish
Mottle-Crazes-Spaker

(1 free	OK	S	
(2 1-2"	OK	S	
(1 free	OK	S	
(2 1-2"	OK	S	
(1 free	OK	S	
(2 1-3"	OK	GS	
	OK		
(1 free			
(2 1-6"	OK	S	
	OK	S	
(1 free	OK	S	
(2 2-4"	OK	S	
(1 free	OK	S	
(2 1-2"	OK	S	

Oven
75 plates & Bubs - Raised 9
1 injured - 57 OK 8 Even, 31 uniform 17 wrink
1 patch final bubbles in all

Buffd T Edged
6 — 50 OK 1 Ckd Var

Free releases 50%
OK 100%

401E 70 Plates 60 cc

100 Req Resin
6¼ % 6/4
½ % Para
10 % Glycerin

Transfer on 1412 brushed plates
Varnish

1	trs	OK	S
2	1-6	Pullout	S
1	1-2"	OK	S
2	1-2"	OK	S
1	free	OK	S
2	/	OK	S
1	free	OK	
2	/	Doubtful Imp OK	S
1	free	Crooked	GS
2	2-4"	"	S
1	free	Redmarg	OK S
2	/	OK	GS

Mailed Groups - Spoke

OVER

74 Plates, 3 tube 2 reused
2 unused 1 short
66 OK after wash 13 Even fine tube
38 uneven 12 wrinkled
3 patched.

402 E 70 Plates 60 cc

100 Req Resin
6 1/4 % 6/4
1/2 % Para
15 % Glycerin

Transfer on 1412 brushed B-Lanx
Varnish

1	2-4	OK	S
2	2-4	Pull out	S
1	free	OK	S
2	2-5"	OK	S
1	free	OK	S
2	free	OK	S
1	free	OK	S
2	/	OK	S
1	free	OK	S
2	free	OK	S
1	free	OK	S
2	2-4"	pullout	S

Creeps - Mottled - Sparkles

Oven

75 plates 1 ruined 1 dust
43 OK of which 19 Even
23 uneven 7 patched 24 wrink

free 79%
OK 83

403 60 cc

Plates	Blurs	Pinned	CKD	Chip	Injured	Dirt	Scratches	OK	Dis	
285	13	59	13	7	2		1	190	95	66.6
				Req	45cc					
420	43	60	19	6		4.	1	287	133	68.3%

403E Hoffman Moore

300 plates with Req Varnish with the Dandrac left out note Cracks + % of transfers + Prints

404E 70 Plates 60cc

100 Req Resin
6½ % 6/4
1 % Para
6 % Glycerin

Transfer to 1412 brushed blanx

Transfers to G2 Taken apart in Chem Lab

(1 free	OK	S
(2 /	Lift cracked	S
(1 1-2"	OK	S
(2 2-5"	OK	S
(1 free	OK	S
(2 /	OK.	S
(1 1-2"	OK	S
(2 2-4"	OK	S
(1 free	OK	S
(2 3-5"	cracked *	S
(1 free	OK	S
(2 4"-6"	OK	S

free 30
OK 83

Varnish
Mölle - Dampface crespo - Spokes

Oven.
70 plates 5 bad. 1 dust
66 OK of which 18 even 3
uneven 45 wrinkled

S S S

* Round stain ! ! !

Moore says every pull out has a stain around it

405E 70 plates 60cc

100 Resin
6½ 6/4
1% Para
10% Glycerin

Vis 3-10

1	1-2"	bind-	S	
2	2-4"	bind-	S	
1	1-2"	OK	S	
2	1-4"	bind	S	
1	free	OK	S	
2	free	OK	S	
1	free	OK	S	
2	~~free~~	OK	GS	
1	free	OK	GS	
2	free	OK	S	
1	free	OK	S	
2	1-8"	OK	S	

Varnish
Mottle, Crazes & pinkies

Oven
75 plates 11 Bubs 2 dust
62 OK of which 8 Even
24 uneven 2 patch
28 Lo-rink

Free 70%
OK 83

406 E 70 plates 60cc

100 Resin
6½ 6/4
1 % Para
15 % Glycerine

1	1-2"	OK	S
2	2-4"	OK	S
1	free	OK	S
2	/	OK	S
1	free	OK	S
2	1-8"	Pullout	S
1	free	OK	S
2	1-4"	OK	S
1	free	OK	S
2	1-2"	OK	S
1	1-2"	OK	S
2	1-4"	pullouts	S

Vis 3-12

Varnish

Mottled, Spokes, Creeps

OVEN

75 plates 1 uneven 1 bubble
2 raised 71 OK of coatings
4 even 20 uneven 2 patch
45 corrals

407E 70 plates 6000

100 Resin
6½ 6/4
2 para
6% Glycerin

1	free	OK	S
2	free	OK	S
1	free	OK	S
2	/	OK.	S
1	free	OK	S
2	/	OK.	S
1	free	OK	S
2	free	OK	S
1	free	OK	S
2	/	OK	S
1	free	OK	S
2	free	OK	S

free - 75
100

Vanamah
Mellie Crisps Opaques.
Vis 3.02

OVEN
75 plates 6 Bubs, 1 Chipped
OK 68 of which 18 even
14 uneven 2 Patch 34 works

408 E 70 plates 60 cm

100 Resin
6½ 6/4

1 % Para

10 % Glycerine

Varnish

1	free	OK	S
2	free	OK	S
1	free	OK	S
2	free	OK	S
1	3-2"	OK	S
2	4 10"	pulled out	S
1	free	OK	S
2	3-6"	OK	S
1	free	OK	S
2	1-2"	OK	S
1	free	OK	GS
2	free	OK	S

Whitlite Crepe-spokes

Oven V 1-3-11

75 plates 6 Bulbs
69 OK after check Even 16
uneven 17 Lowenko 36

free 60%
OK 90

409 E 70 plates 600cc

100 Resin

6½ 6/4

2 % Para

15 % Glycerin

1	free	OK	S
2	/	OK	S
1	1-2"	bend	S
2	3-4"	OK	S
1	/	OK	S
2	2-4"	pull out	S
1	free	OK	S
2	free	OK	S
1	2-3	OK	S
2	2-2	OK	S
1	free	OK	GS
2	free	OK	S

Varnish

Matte Crazes, plates full of holes

Oven

74 plates 2 bubs 1 raised

OK 71 of which 11 Even 13 uneven

2 patch 45 wrinkled

Moore says around in pull out
we always have a fog

* Big gob var so great crused
Cracked blank & actually forced
Var down in Crack

374 EX For 374 EX see 2nd page
in this book —

Moore make 24 flat Var plates
+ 6 mould holders to hold
them to test new 1412
blanks —

375 EX

Used 404 EVar

Turn down 12 Reg var plate
Edges so Edge is only 10/1000

above level instead of 1½

1	free	OK	S	1	free blank broke	S
2	/	OK	S	2	"	"
1	free	OK	S	1	free	OK	S
2	free	OK	S	2	free	OK	S
1	free	gob Var	S	1	free	OK	S
2	free	gob var	S	2	free	OK	S
1	free	OK	S	1	free	OK	S
2	free	OK	S	2	free	OK	S
1	free	OK	S	1	free	OK	S
2	/	OK	S	2	free	OK	S
1	free	OK	S				
2	free	OK	S				

Too much Var
after Edging & Bfg

410 E Weld Varnish

10 Resin –
16 Alcohol
800 mlg 6/4
600 mlg Para
for coaling

144 minutes welds less than
29 minutes as I checked
watch –
This is one of 410 + 412

Dried a little – then put right
on hot plate 180° fahr baked
up but went rubbery in
$1\frac{1}{2}$ minutes

No 10 is just as good as
411 + 412 Think can
use less Para + do it
in 5 minutes

411 E

10 Resin
16 Alcohol
800 Mily 6/4
800 " Para

412 E

10 Resin
16 Alcohol
1 gram 6/4
600 mg para —

										OK Prints
362	Transfd	29	200K	4PO	4 Ckd	1	1	30%	7	10
364	"	36	11 OK	11	7			40%		19%
365	"	25	10	12	3			36%		20%
366	"	25	9	10	6			60%	2	10%
367	"	29	19	3	5	1		140		30%
368	"	21	8	11	7			40		100%
369	"	31	12	8	11			46		8%
370	"	28	13	7	8	3		63	1	10
371	"	30	19	4	3			35	3	30 -
372	"	28	10	11	4	1		34	3	40 -
373		29	10	9	6			424		50 -
										317

Net Records
424 average OK Transfers

Average Records 12.4 %

Its looks as if high phenol was not a success no matter how it is varied

413 E Free phenol Var contracts

362
363
364
365
366
367
368
369 - ?
370
371
372
373

Print on Reg Music -

all the plates left are to be transferred & printed on Regular Blanx

And account kept of % OK both for Transfers + Prints -

Apparently 368 Phenol Var gives highest production of Concl Records 40%

414F Moore –

Flow the 2 ¼ steel plates
ground flat. Flow with
Reg Varnish Bake Regular,
schedule in oven & put in
box & bring over – I want
to turn the faces of the varnish
on a new turning off
Machine Lathe in making

Reg plates

Reg blanks + Reg Varn
no squeeze or flood
of varnish

1 free OK
2 free OK
1 free OK
2 free OK — Smooth plate fine - 1412 blank
1 free OK
2 free OK
1 free OK
2 off - OK
1 free OK
2 off OK
1 free OK
2 4-3" OK
1 free OK
2 4-3" OK
1 free OK
2 free OK
1 free OK
2 free OK
1 free OK
2 free OK
1 free OK
2 free OK

All these but the flat surface which is 1412 blank are reg plates + reg blanks - All look OK dont squeeze out on Edges or chew the Varnish up like regular Schedule -

87.5 lbs free
100% good

We will print 6 using only 500 pressure instead of 1000 -

1412 OK Except poor print

Printed 6 -

1 feed lays ok + faint Cks margin 45cc 1412 blank
2 1412 flat OK Except pprint smooth side - 60cc

1 - pp comal - OK
2 pp " OK

1 pp " Comal
2 pp Discard

1 pp " Discard
2 ok but 3 cks ¼ long - due to flow of var

1 pp Comal one fine (fed) lines ok
2 ok OK

1 OK OK
2 OK

415 E

Reg 60cc 1412 blank

Moore take 100/1000 steel plate with groove near edge - Reg Var 45cc Transfer Reg blank but bring to point where it squeezed out a little, 1 min at 100 lbs pressure - ~~bro~~ got to 130° Fahr

2 -	125 lbs pressure		240°	
3	125	"	230°	
4	125	"	260°	
5	125	"	280°	
7	125	"	303°	
8	"	"	312	no squeeze
8	250	"	318	Squeeze Trifle
10	"		318	no more
11	"	"	320	Started Curl
12	"	"	320	from the Edges
13	"	"	320	"
14	"	"	"	"
15	"	"	"	Cooled.
	250	1½ min	316	
	"	2½	286	
	"	3½	244	
	"	4½	206	
	"	5½	174	
	"	6½	150	
	"	7½	144	Took out.

Ran them Regulars Req transfer & print Schedule to Check 416

Transferred -96- 91 OK
2 pullouts 2 Sinks 3 ckd Var
Night inspection 94%

Prints 91 — 44 OK 7 cracks
4 feed line —

Final Inspection to clock room —

416E

Transfer + Print ~~100~~ 96 Req Var
+ Blanks —
on Changed Schedules

Transfer Req Except 300 Lbs pressure

Print regular Except use 700 Lbs Instead of 1000

Use Req Music

Transferred 96 91 OK 4 ckd Var
1 mechanical defect
94.8% OK —

Inspected at night + may not be so high % —

Prints, 91 OK 60 12 Cracks 3 poor print
16 Line Cracks

Final Inspection for clock Room —
66% OK —
not tested for music

45cc Reg Vac + 6 Cauk

Prints of 415E

RO		
1		
2	good IIII (1 not flat plate)	Rolling for surface made different here fine here is a good on 1412 – good is fair on 1412 + fair is Ref on 1412
3 III		
4 II	fair II	
5 II (1 not flat)		
6 IIII	Ref.	
None		

Above only Experimental

~~415~~ 17E X 1412 45cc 500 lb pint

415 E X

RO		
1		
2	good	
3 I		
4	fair	
5 IIII		
6 IIII	Rough	
none II		

All on cracked blank no plain surfaces

1412 Blanks

500 grms weighed out
500 lbs rubber pressure
$\frac{1}{8}$" strike off.

Leaves moulds clouded.
Average weight 410 grms
Average gauge 210 @ 220
Powder ground Fuller Mill 90% thru 180
Screened Newago 98% " 180
5 wood 2 Chalk 2 Shellac
Delivered to Presses on Spring Truck rubber tires
Regular Schedule
2 min Contact
7 " 1000 lbs 100 lbs steam
7@9 min cool.

24 blanks 91.6% 007 + less
95.8 010 + "

Printed 12 - 600 lbs instead of 1000

1 slight PP - OK
2 — OK

1 slight pp mar - feed line ok Record
2 — OK — smooth

1 — feed line - pp slight Record - no marg marks
2 — flow long print ok - in - smooth -

1 OK Record side
2 OK " "

1 Poor print notched Record
2 few fine cks margin smooth.

1 - pp, margin Cancel OK
2 slight extreme margin ok smooth OK

417E	
RO	Fair
1	
2	good
3	
4	fair
5	
6	R
more	

417EX - Print at 500 lbs
Use tracked moulds on both sides

1 poor print no crax
2 " " but only little no crax

1 OK good print
2 OK " "

1 almost good - poor print slight
2 good print 1 faint parallel ck 1/8 from edge

1/2 Both poor print but nearly good - few margin cks

This shows that with reasonable float Var 1412 Req Var would be OK - + 387 better

1 = OK
2 Slight poor print
1 OK
2 OK.

Welds good 1/8 @ 3/16 worst

417E See 1 page back

12 of the 1412 brushed blanks
Req Var 45 cc.
Transfer on following schedule
1 Min Contact 100 lbs
8 " at 125 "
6 " " 250 "
Cool.

Blanks stick to plate 1 side 6
" both sides 2
Released freely 4

Transferred 12 12 OK — 100%
after edging & buffing & day inspection
all OK 100%

Printing schedule Req is 2 min heat
3 min Contact 5 min 1000 6 Cool

Print 417 Req Except reduce 5 min at 600
P.

12 [illegible]
12 V
1 VV

418E
RO — Fine 160 RO
1
2 1 — good
3
4 1 — fair — Both sides tracked
5
6
None — 16 Ruf.

Inspection - ~~only three~~ Rough
OK | Dis

75% OK —

Put away for time test,
2 — 2/6 — 16 — noon —

Note This is Regular Var 45cc 1412 Blk
Schedule 250 lbs presure 85.5% OK
Printing 600 lbs presure 75% OK

Get record of the 73 left over
for Print
Factory Eye inspection 71 Records 35 OK 34 Clks 2 fixed him
Woore ry well go over them Total discards 36%

418E

This means either 250 not enough or it should be put on at once —

Run thru 96 1412 blanks tracked
use Reg 45cc Var
Schedule
1 min Cool at 100 lbs pressure
8 " at 125
6 " at 250. Cool —

Print 12 at 600 lbs pressure.
until we see how they print,

Transfers 96 - OK 85 (5 Cracked Center)
Centers red left Ckd — 1 Thin Margin —
85.5%

Run balance on Music moved
& have up stairs test,
print — using same
print schedule —

Note 418 — + Compare 419 —
Same blank — Same schedule
Req Var + 387 qty Var 450cc + 460cc

Req Transfer efficiency 85.5%
387 " 33.3%

The difference is due to cooked
Centers + puff outs on 387

Evidently 387 being thicker or not
so much condensed, or has poorer
flowing qualities cannot make
good contact between blank + plate
Hence Cooking at Center

We should vary time + pressure
till we get proper schedule

This is only qty 1412
250 lbs Transfer up made
up to here —

419 E

Transfer 12 1412 breached

blanks Using Varnish plates
from 387 E — 460cc

Use Transfer schedule of 318

Use 1 mm Contact 100 lb
8 " 125
6 " 250.

1 free	1 Pull out, bad shrinkage
2 free	OK
1 - free	Crack left.
2 - /	OK
1 - free	Cooked ckd
2 - / 2	Cooked ckd
1 free	PO } Red Centers
2 4-8"	PO - }
1 /	OK
2 4-6"	OK
1 free	OK
2 free	OK
1 free	OK
2 /	OK
1 /	Long Edge ok - minimum to 6"
2 2-3"	bad pull out

1 free	long 6" squeeze ok
2 /	bind
1 free	cracks = Group ckd -
2 /	OK -
1 free	OK
2 2-4"	long crack at pressure + no pressure
1 free	OK
2 /	OK -
1	
2	

See Original page 395E for record of 419 420 421 422

4 OK

420 E

Dup of 419

Except use 391 E Vcr pole

1 free Cooked C ck
2 free Longflow crook

1 free OK
2 / OK

1 free PO
2 / PO

1 free cooked C bird
2 1-6" " " ck

1 free Cooked Longflow Crook
2 free Cooked " "

1 free OK
2 2-6" OK

1 free cooked PO
2 2-4" Cooked PO

1 free Cooked PO
2 2-5" Cooked PO

1 free PO-long ck
2 / Marqm ck

1 2-5 PO
2 4-8 OK

1 free Cooked C ck
2 / " ck

1 1-2 Cooked
2 3-5" Cooked

1 OK

421 E

Dup of 419 E

Except uses 395 E Vour plates

(1 free OK
2 / OK

(1 free Cooked C
2 1-3" "

(1 free Cooked C ckd
2 2-4" OK

(1 free OK
2 free OK

(1 1-1-2" Cooked ckd
2 2-3 Cooked ckd

(1 free Cooked ckd
2 / Cooked

(1 free Cooked only long Marqm ck - unequal Vour
2 1-3" Cooked only

(1 2-3 OK
2 3-4" PO

(1 free OK
2 / OK

(1 free OK
2 3-10" pull out cancel

(1 free OK
2 2-4" OK

(1 free Cooked ckd
2 2-5 Cooked ckd

30Ks

422 E

6½ 6/4 ½ Pieces

Dup of 419 E

Except use 399 Van Plates

(1 free OK
(2 2-6" OK

(1 free ck) from heat & Cooked
(2 2-6" Cooked

(1 free OK
(2 / OK

(1 free Cooked) ck)
(2 free Cooked

(1 free OK
(2 / PO-

(1 free OK
(2 / OK

(1 free OK
(2 / OK

(1 2-3 OK Slight C Cooked
(2 3-5" OK

(1 1-2" 2 PO small
(2 2-4" " "

(1 free Slight Cooked C same long edge ck closed up
(2 free " "

(1 free cracks closed long
(2 free OK

(1 free OK Slight red Center
(2 free OK

5 OK

			8 days
#1	dished on transfer side	019	034
2	"	025	022
3	"	027	025
4	45 CC flat.	000	flat
5		023	032
6		014	flat

Those with 387 Varnish on [illegible]

1	on 1 side — 60 CC flat	000	000 [illegible]
2		000	000 Ripped up [illegible] 2" [illegible]
3		000	030
4		000	01 [illegible]
5		000	015
6		.0115	025

Callipered within an hour
These put away on top of book case to be callipered for dishing from time to time

2-25-16 6PM—

PHENOMONON

423 E

Pick out couple dozen rzg blanks and 2 dozen 1412 blanks see they are same calliperis —

Transfer ~~the~~ 6 of each on one side of the blanks to see the amount of dishing of the 2 varnishes ~~[illegible]~~ 387 E will give —

Be sure that the plate on which bare blank rests is itself perfectly flat,

Calliper as to thickness for all & Run in same press —

Schedule		
1	min contact	100 lbs
8	at	125
6	at	250 Cool'

424 E Make this varnish —
Make up enough
387 E Varnish to flow 400
plates — Only flow 200 50 cc
plates and keep the balance
of the Varnish in Ice Chest, until
further notice —

---

flow 200 plates —
50 cc —

Turned 60 cc Transfer –
fine surface polished and it
had a turned surface —

It didn't take 600 pressure
percent, not Enough –

NOTICE

A turned Transfer although it
has a matte surface produces
a Record with good polish

425 E

Fred Oft standing on giving Transfer
plates an Extra squeeze before transfer
but pressing face with polished
plate to Even it up & make it
flat 1102 200° Fahr &
250 lbs pressure only 10 sec
squeeze with pressure on
then cool keeping pressure
on till 120 deg then remove

These are to be transferred on
1412 blanks 250 lb
schedule – & pressed 600

also some on Reg blanks

Reg Transfers 45cc Can't do anything with
only few spots press – with 391
75% pressed OK but cooked part
cracks – 391 has no cracks where
pressed – Fred says 391 is very soft
Compared to Reg Var –

This Scheme dont promise well

2 Cast iron plates
June 11

611

2 Cast iron = Inspection —

1 = feed line cracks want on Edge grooves

2 slight crack

flow of Var on smooth
causes a couple of grooves out
Extreme Edge to stop flow —
grooves dont do it — Its too much flow due
to too much pressure want lower
pressure & a perfected schedule & probably
more time at high heat in oven to condense more
but not by adding more 6/4 —
We must have outer 2 edge grooves to
block smooth part or Marginal groove
squeezing

426 30

[illegible] & turned off with Edge
[illegible] or chamfering
mould to a Wiener
If we can spin the Var so much the better

426 — 250 lbs Transfer Schedule

Transfer 2 Cast iron plates
60cc Var Reg Turned off in
Music recording machine

Free. No squirt.
One side OK other side $\frac{1}{16}$ $\frac{1}{32}$ holes in cast
iron — pull outs had plate been OK
both sides would be fine —

Single steel plate. other side reg plate —
not turned off —

Steel plate Record
other side Reg & Silver plate

fine V surface = hadfeed line OK
& also $\frac{1}{16}$ from Edge a short squirt OK
otherwise not so good surface
1895, Var Cuts — 5

427 E

Moore make 6 Transfers
391 E Van on 1412 6 Facuks
250 LB Schedule –
Want to try an Experiment
of turning off transfers
instead of plates –
Get as soon as possible
They are in Chem room now –

Spermaceti — Cetylic Alcohol —
MP 50° Cent BP 344°C

Styrone Cinnamic Alcohol. Monoatomic
BP 250° C

glycols — Diatomic Alcohols

glycerin Triatomic "

Myricylic Alcohols from Beeswax

Cerylic Alcohol from Chinese Wax

~~We have made these blanks transferred them~~ but th.

429-E

Moors make 2 10/1000 grooves in both plates of one mould we make 1412 blanks -

Finished blank

& Make some blanks

Also Couple of working moulds & throw up two $\frac{10}{1000}$ rings at Extreme 1/32 in ~~out~~ from Edge to stop feed line Crax

Record - just a few made of Blank

Want to find which is best,

Moore –

Callyper diameter of some of the 1412 blanks with 60cc 387 Var on where the Var has been Uneak a Cracked Marque The eye may not show it but perhaps Record is no Longer round

Edison did it nothing in it

430E

Take the 6 Blanks Transferred only one one side with Regular Var 45cc And the 6 Blanks transferred only on one side with 387 Var 60cc And print them on the Varnish side only with Tracked 6 Blanks

The Reg Schedule 1000 Lbs –

Want to see if they dish still more

Moore

Get 418E 75 Records

Report

Also the Records

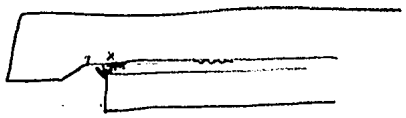
Also 416 – 84 Records

NOTICE

Can it be Edge & feed line Cracks are due to blank flowing – Caliper & see if larger at check Var Ckd points

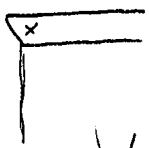
Why did 426 Prov. have feed line Crack

431



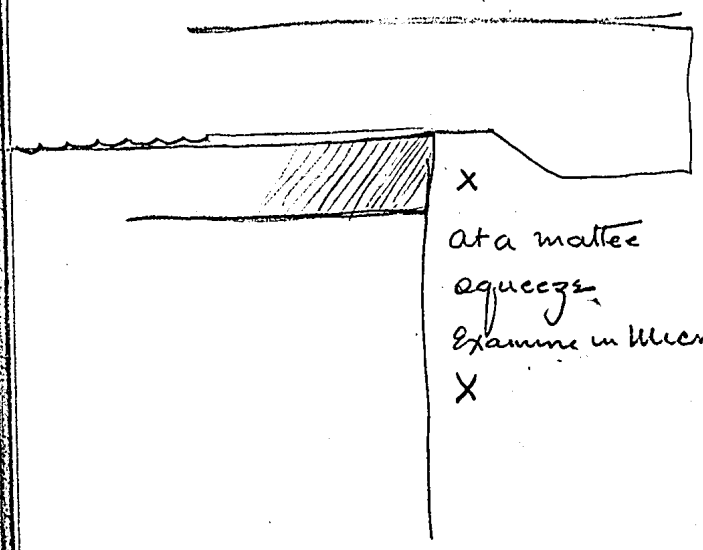
perhaps bottom of Var on blank is anchored but top is on a smooth slipping metal & lap squeezes & flows outward thus making feed line cracks – Lower pressure & longer time & more condensed veneer should –

Where there are margin & feed line cracks look in Micro & see if



Varnish hasn't gone forward beyond edge blank – if not if blanks cent eccentric 005 or 006 thus stretching Var –

Saw pieces out after Callipering & look in Micro – Could be concluded by grooving blank under smooth part or 1/8" of feed line – leaving 1/8" smooth – in addition thus would anchor both sides –



Y Moore

Prints of blanks which have a groove at Edge are taken prints from working mould copper which has an unlacquered ring recessed up, on Edge

The later ringed mould produced a print which was superior to the 2 reg prints made at same time,

But the Expert shows that this ring does not stop entirely Marginal cracks or feed line cks where the Varnish is thicker on one part of Edge than the other argues a matte Edge — it draws the Varnish + makes the 2 kinds of Cracks -

~~The~~ The Var used was 404 E on 1412 blank —

No 6 Moore –

The pull outs could probably be prevented by more hardening in oven or press, longer holding in oven at 235 would probably be best say 1 hour or 2 hours more – or 5 minutes more, in press

find if this is reg schedule except 300 pressure –

The closed cracks possibly could be prevented by 350 pressure put on at once to stop cooking or unequal hardening

No 6 Moore

Grooved at Edge blanks 387E Var
300 lbs pressure in Transfer press 1412 blanks
6.0 CC Var

(1 Free OK
(2 1-4" OK

(1 free OK
(2 / OK very slight Cooked Center

(1 1-2" OK
(2 2.3" Pull Out

17 OK on press OK
5 Transfer OK

40% OK –

(1 free OK
(2 free OK

(1 free OK
(2 2.6" Closed crack } slight red Center

(1 free OK
(2 1-5" OK

(1 free OK
(2 / OK } very slight cooked Center

(1 free OK
(2 1-4" Closed crack

(1 free - very fine pull out
(2 2-6" Margin blister Ckd

(1 2-4" OK
(2 2-3" OK } cooked center Edge of blank Crushed

(1 free Fine pull out
(2 / OK

(1 free OK
(2 3-5" Pull out

[ITEM(S) FOUND IN BOOK]

Transfers

Para	6/4	Glyc	Plates	Bubs	Free Release	Raised	Uneven Ducan	OK	Even	Uneven	Wrinkle	Patch	Dis	Transfers OK	Transfers OK	
1	6	4	71	15	9	1		55	12	26	16	1	16	10	4	387
1	6	6	71	—	11	9		61	18	26	16	1	10	12	6	388
1	6	10	72	9	9	4		59	15	20	22	2	13	10	5	389
1	6	15	73		7 36	2		68	14	35	17	2	5	10 42	4 19	390
1	6 1/4	4	75	2	11	4	Φ	69	9	21	36	3	6	11	5	391
1	6 1/4	6	70	3	12	2	1	63	8	31	23	1	7	9	4	392
1	6 1/4	10	74	5	7	5		63	8	16	36	3	11	10	4	393
1	6 1/4	15	74	2	8 38	—	—	69	14	39	7	9	5	8 38	3 16	394
2	6 1/4	4	75	2	10	4		67	3	8	54	2	7	11	5	395
2	6 1/4	6	75	4	9	9		60	5	23	30	2	8	6	1	396
2	6 1/4	10	75	—	4	7		67	5	32	28	2	7	9	3	397
2	6 1/4	15	75	6	3 26	3		65	19	38	5	3	9	9 35	4 13	398
1/2	6 1/4	4	74	3	9	9	all fine bubs	62	4	32	23	3	11	11	5	399
1/2	6 1/4	6	75	8	9	9	[illegible]	57	8	31	17	1	17	12	6	400
1/2	6 1/4	10	74	3	10	2	2.1%	66	13	38	12	3	5	7	2	401
1/2	6 1/4	15	75	—	8 36	1		73	19	23	24	7	1	10 41	4 17	402
1	6 1/2	6	70	5	8	—		66	16	3	45	—	3	10	4	404
1	6 1/2	10	75	11	9	—		62	8	24	28	2	12	9	4	405
1	6 1/2	15	75	1	8 25	2	Uneven	71	4	20	45	2	3	10 29	4 12	406
2	6 1/2	6	75	6	12	—	—	68	18	14	34	2	6	12	6	407
2	6 1/2	10	75	6	9	—		69	16	17	36	—	6	11	5	408
2	6 1/2	15	74	2	8 29	1		71	11	13	45	2	3	10 29	4 15	409

				Faces		Free Release
15 -	15 24	Transfers		37		26
10	14 OK	"	less glycerine test	36	less gly test % faces	30
6	16 OK	"		39		41
4	19 -	"		43		39

[ITEM(S) FOUND IN BOOK]

Para	6/4	Phenol	Plates	Bubs	injured	Free Release	Burst	Raised		OK	Even	Unevn	Wrink	Patch	Dis
1%	8	7	73	2		11		1	73	69	23		44	2	4
1½%	8	8	82	9	2	7		—	82	70	38	4	28	—	12
1¾%	8	9	78	11	—	11	1	—	78	66	24	4	38	—	12
1%	8	10	79	18	—	6	35	—	79	61	20	8	26	7	18
				(40)							(105)		(64)		46
3%	8	7	70	2	—	11	1	5	70	62	3	9	48	2	8
3%	8	8	70	1		12			70	69	16	9	44	—	1
3%	8	9	70	12	—	6		3	70	55	7	—	48	—	15
3%	8	10	74	2	—	8	37	—	74	71	3	11	51	—	3
				(45)							(29)		(48)		27
3%	7½	7	70	—	—	12		2	70	68	4	7	55	2	2
3%	7½	8	70	—	—	11		—	70	70	5	12	53	—	0
3%	7½	9	70	4		9		1	70	64	3	5	53	3	6
3%	7½	10	70	1	1	11	43	1	70	67	5	20	42		3
				(5)							(17)		(51)		11

[ITEM(S) FOUND IN BOOK]

Moon - Cooling down
clown so black &
Venus continual same
painting

[ITEM(S) FOUND IN BOOK]

5% Residue after CCl_4 —
Sets about same as the white crystals
~~th~~ has bubbles just same —
but notice that unlike the white
stuff it dont crack, simply
puff in many places —
Whereas when 10% Trichloropheno
was in no bubbles & left dry as
a cohale
Later it starts to show isolated
cracks —

Also find it sticks to glass
bottle — Note this —

[ITEM(S) FOUND IN BOOK]

Reg Varnish 15% more 6/4 than Reg
9% — added 2½% Crude para
+ 1½% Trichlorophenol
acts fine on small metal
plates acts very quick — no bubbles
is tough after laying on steel plate
dried with glass plate resting
on it — Looks very promising

5% White crystals from extracted
Crude para by Carbon Tetrachl
on glass plate 3/4" above hot
plate — no bubbles in 20 minutes
bubbles — notice after ½ hour on
3/4" glass when put on plate it puffed
in spots + also Cracked, all short cracks
Comes off plate OK

[ITEM(S) FOUND IN BOOK]

10% Naphthalen
2½ Crude Para —
Varnish turns black —
after gray mahogany req red —
bubbles a little / acts rather
req time perhaps little
glacial — pu put plate puffs in beg
Comes off fairly easy =

5% DEthazin Para-Basic - turns very
black on tiller plates at first after
a while it turns red like the
others — Cracks slightly puffs up in
places when put direct on plate
Evidently Para alone makes too
great contraction & makes unusual
Cracks wants a filler like Penta
or Trichlorophenol — DEthazin dont act
any quicker than over Para —
Shows little to peel from apart, Comes off